Abstraction

The multiple simultaneous concurrent tasks support on web-based console provides a way to let CCDSVM to be operated like a single machine. The combined software modules of CCDSVM have actually formed a model of web-based virtual operating system. To achieve multi-tasks support on web-console for CCDSVM, the control management station shall has console supporting software modules and web server software, the console host shall has web-browser, and the system units shall has service software modules. The console supporting software modules shall include a user space task list to store all tasks initiated by users from web-consoles. These software modules of this invention, which may be implemented with various programming languages and applies various communication protocols, on different systems shall be capable to communicate with each other through either network links in Intranet, or Internet, or LAN environment or through inter-process communication mechanism on native system. In addition, console supporting software needs to obtain associated conventional or non-conventional locks for each tasks and properly release these acquired locks one at a time in the order during each tasks executing up to the point when the tasks are finished. This shall ensure that multiple simultaneous concurrent system tasks and operations will be executed without interfering or blocking each other and without any delay. All methods and principles of multi-tasks support through we-console for CCDSVM also can be applied to a non-web-based networked console in CCDSVM environment. The implementation of Web-console support of CCDSVM actually created a unified user working environment for various operating systems and let user to access the working environment of various operating system of a single or multiple systems consistently through a web browser either locally or remotely.